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EXAMINER
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NGUYEN BA, HOANG VU A

ART UNIT	PAPER NUMBER
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2623

NOTIFICATION DATE	DELIVERY MODE
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10/09/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 09/923,232	<b>Applicant(s)</b> MILOVANOVIC ET AL.	
	<b>Examiner</b> Hoang-Vu A. Nguyen-Ba	<b>Art Unit</b> 2623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 10, 12, 29, 34, 46, 49, 52 and 55-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 10, 12, 29, 34, 46, 49, 52 and 55-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 2, 2007 has been entered.
2. Claims 1, 10, 12, 29, 34, 46, 49, 52 and 55-58 are pending. Claims 1, 10, 12, 29, 34, 46, 49 and 52 are independent claims.

### *Response to Amendments*

3. Per Applicants' request in Amendment filed July 6, 2007, claims 34 and 49 have been amended and new claims 55-58 have been added.
4. The objection to Claim 34 is withdrawn in view of Applicants' amendment to claim 34 to correct an identified informality.
5. The rejection of Claim 49 is withdrawn in view of applicants' amendments to claim 49 to no longer recite a single means.

### *Response to Arguments*

6. Applicants' arguments at pp. 8-11 in the Remarks filed concurrently with the above-mentioned Amendment have been fully considered but are not deemed persuasive. Following is an examiner's response to Applicants' arguments.

#### Applicants' arguments:

Claims 1, 10, 12 and 29 recite subject matter not made obvious by the combination of Merjanian and Darbee et al. Claims 1, 10, 12 and 29 recite "some control keys disposed in a

thumb actuated cross configuration" and "the fingerprint sensor is integrated within a middle portion of the thumb operated cross configuration." The FINAL REJECTION admits that Merjanian does not disclose this limitation but cites Darbee et al as teaching the recited thumb actuated cross configuration. The FINAL REJECTION fails to provide any motivation for incorporating the fingerprint sensor of Merjanian into the OK key of Darbee et al. In contrast, this application states at page 11, lines 13 to 17:

"The illustrated embodiment has an arrangement in which the volume up/down keys 43 and channel up/down keys 45 are positioned in a thumb operated cross 40, with the finger print apparatus 26 located in the middle of the cross 40. This arrangement allows non-participatory identification of the user by analyzing the user's thumbprint when the user changes channels or the volume."

This application also provides clear teaching of the advantage of such "non-participatory identification of the user." There is no teaching in either reference that such a combination is feasible or advantageous. Note that Merjanian illustrates in Figure 7 a platen 30 exposed to the user's digit and a set of keys 212H, 212I, 212J and 212K disposed in a cross configuration omitting the claimed middle portion. Darbee et al teaches a keyboard 15 including a cross configuration of keys with a middle OK key. Darbee et al also discloses at column 4, lines 5 to 11 a fingerprint recognition device. Accordingly, both references teach the essential parts of these claims. However, neither reference includes any teaching that a fingerprint sensor can be used with a middle portion of a set of thumb actuated control keys in a cross configuration. The Applicants respectfully submit that the existence of the separate parts of the claimed invention in the prior art without the claimed combination is evidence of unobviousness. Accordingly, claims 1, 10, 12 and 29 are allowable over the combination of Merjanian and Darbee et al.

Examiner's response:

In response to Applicants' assertion that the Final Rejection fails to provide any motivation for incorporating the fingerprint sensor of Merjanian into the OK key of Darbee, the examiner respectfully directs Applicants' attention to p. 4, last paragraph and p. 5, first paragraph, which states:

"However, in an analogous art, Darbee teaches a remote control device with an OK, or PPV control key disposed within the middle portion of the thumb operated cross configuration (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39), or selecting the PPV option. Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PPV control key as this would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user."

In response to Applicants' assertion that "the existence of the separate parts of the claimed invention in the prior art without the claimed combination

is evidence of unobviousness,” the examiner respectfully notes that the motivation for the combination of Merjanian with Darbee is clearly articulated in the above-cited portion of the Final Office action.

Applicants’ arguments:

Claims 34, 46, 49 and 52 recite subject matter not made obvious by the combination of Merjanian and Darbee et al. Claims 34, 46, 49 and 52 recite “said control keys include an activation key operable to activate the remote control device, and said fingerprint sensor is embedded in the activation key.” The FINAL REJECTION states at page 8, lines 17 to 20:

“(see at least FIG. 7; it is noted that operating any of the buttons shown inherently activates the remote controller which does not need to be turned on per se with a button which is reserved only for turning on/off the remote controller).”

This inherency of Merjanian fails to make obvious the recited limitation. While the FINAL REJECTION states that the remote control of Merjanian does not need to be turned on, these claims recite “an activation key operable to activate the remote control device.” Thus Merjanian not needing to be turned on does not make obvious the recited activation key. Likewise, while Darbee et al discloses power supply 30, supervisory circuit 31 and batteries 32, it fails to disclose that activation of any key is necessary to active the remote control unit. The FINAL REJECTION states at page 9, lines 19 to 24 and at page i0, lines 19 to 23:

“However, in an analogous art, Darbee teaches a remote control device with an OK, or PWR control key (see at least FIG. i) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39).”

Examiner’s response:

The claimed “key” in the limitation “activation key” is broadly and reasonably interpreted to be a mechanism. The function “operable to activate the remote control device” of the claimed “activation key” is interpreted to be equivalent to the function performed by the combination of the fingerprint acquisition means (e.g., Merjanian, the platen 30 in FIG. 7), conveying means for conveying the fingerprint signal to the set-top box, comparison means at the set-top box for comparing the fingerprint signal to stored fingerprint data for a match and means responsive to any match for adjusting one of the service level and the preference setting to provide access to channels for which access

is normally restricted (see at least 3:31-47). Thus, the above-listed combination of means of Merjanian performs the function of making the remote control become active.

Furthermore, when assigning the above-mentioned means combination to the OK button of Darbee for the purpose of enabling or activating the remote controller, download of desired materials will start subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

Applicants' arguments:

The FINAL REJECTION makes similar arguments regarding claim 52 at page 11, line 22 to page 12, line 3. Darbee et al includes no teaching regarding the operation of the OK key. Accordingly, this cannot make obvious the specific limitation recited in claims 34, 46, 49 and 52. Further, Darbee et al includes no teaching regarding the operation of the PWR key. The Applicants respectfully submit that one skilled in the art would believe this PWR key operates to activate the controlled device rather than the remote control device as recited in claims 34, 46, 49 and 52. Thus the cited teachings of Darbee et al teach activation of a different apparatus than recited in these claims. Merjanian and Darbee et al fail to teach that operation of a control key actuates the remote control device as required by the limitations of claims 334, 46, 49 and 51. In contrast, this application states at page 11, line to page 12, line 1:

"In another preferred embodiment, the finger print apparatus 26 is incorporated on the remote control device 41 as an 'activate remote' key that must be pressed in order for the remote to start functioning. In this embodiment, the finger print can be read when the remote control is activated."

Embedding the fingerprint sensor in such an activate remote key ensures capture of the user's fingerprint before any controlled operation. The combination of teachings cited in the OFFICE ACTION fails to make such a requirement. Accordingly, claims 34, 46, 49 and 52 are allowable over the combination of Merjanian and Darbee et al.

Examiner's response:

The examiner agrees with Applicants that the PWR key is used to activate a controlled device, e.g., the set-top box. As for the OK button in FIG. 1 of Darbee, although there is no specific description of the function of the OK key in Darbee, the commonly known equivalent of the OK key is the "Enter" key on any standard remote controller. The OK key can be modified

to incorporate the Merjanian's combination of means for verifying the user's fingerprint and granting the user access to the set-top box if the fingerprint matches with the stored fingerprint of the authorized user. Only a successful authentication could activate the remaining keys on the remote controller to perform their pre-programmed functions when the keys are being pressed on.

Thus, the combination Merjanian-Darbee appears to meet the claim requirements and give a reasonable expectation of success.

Applicants' arguments:

New claims 55 to 58 recite subject matter not made obvious by the combination of Merjanian and Darbee et al. Neither Merjanian nor Darbee et al disclose the claimed sleep mode forgetting fingerprint data or that return from sleep mode re-acquires fingerprint data.

Examiner's response:

See discussion of Claims 55-58 hereinafter.

***Claim Rejections – 35 USC § 103***

7. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 10, 12, 29, 34, 46, 49 and 52 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,920,642 to Merjanian (art of record) in view of U.S. Patent No. 6,130,726 to Darbee et al. ("Darbee") (art of record).

### Claim 1

Merjanian discloses *a system for user recognition and customized content provisioning, the system comprising:*

*a remote control device having a plurality of control keys, the remote control device including a fingerprint sensor embedded in one of said control keys, whereby activation of said one of said control keys reads fingerprint data of a user's finger (see at least FIG. 7); and*  
*an apparatus capable of presenting customized content to the user controllable by activation of said plurality of control keys, the customized content selected dependent upon said fingerprint data of the user's finger (see at least 3:27-53).*

Merjanian does not specifically disclose *said control keys including at least some control keys disposed in a thumb actuated cross configuration, and wherein said fingerprint sensor is integrated within a middle portion of the thumb operated cross configuration.* However, in an analogous art, Darbee teaches a remote control device with an OK, or PPV control key disposed within the middle portion of the thumb operated cross configuration (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39), or selecting the PPV option. Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PPV control key as this would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.



### Claim 10

Merjanian discloses *an apparatus for content provisioning comprising:*

*means for acquiring data related to a user without active user input or participation, the means for acquiring data including a remote control device having a plurality of control keys and a fingerprint sensor (see at least FIG. 7; as for the limitation without active user input or participation, the Office's interpretation of this requirement is that the user does not have to actively input any information or actually press any key to have the sensor read the fingerprint of the user as described by Merjanian at 11:30-31 – the user only need placing his/her digit on the sensor);* and

*means for presenting customized content to the user controllable by activation of said plurality of control keys, said customized content selected in response to said fingerprint data of the user's finger (see at least 3:27-53).*

Merjanian does not specifically disclose that *the fingerprint sensor is embedded in one of the control keys and whereby activation of said one of said control keys reads fingerprint data of a user's finger, said control keys including at least some control keys disposed in a thumb actuated cross configuration, and said fingerprint sensor is integrated within a middle portion of the thumb operated cross configuration.* However, in an analogous art, Darbee teaches a remote control device with an OK, or PPV control key disposed within the middle portion of the thumb operated cross configuration (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39), or selecting the PPV option. Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to

a person of ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PPV control key as this would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

### Claim 12

Merjanian discloses *a television system comprising:*

*a remote control device having a plurality of control keys, the remote control device including a fingerprint sensor (see at least FIG. 7);*

*a processor communicatively coupled to the remote control device, the determining characteristics of the user based upon the fingerprint data (see at least 11:17 – 12:14); and*

*a display providing content to be viewed by the user, the content being customized for the user based upon the characteristics determined by the processor (see at least 3:27-53 and 11:17 – 12:14).*

Merjanian does not specifically disclose that *the fingerprint sensor is embedded in one of the control keys and whereby activation of said one of said control keys reads fingerprint data of a user's finger, said control keys including at least some control keys disposed in a thumb actuated cross configuration, and said fingerprint sensor is integrated within a middle portion of the thumb operated cross configuration.* However, in an analogous art, Darbee teaches a remote control device with an OK, or PPV control key disposed within the middle portion of the thumb operated cross configuration (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39), or selecting the PPV

option. Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PPV control key as this would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

### Claim 29

Merjanian discloses *a remote control device comprising:*

- a housing (see at least FIG. 7);*
- electronic circuitry disposed within the housing (see at least FIG. 7);*
- a signal transmitter disposed within the housing (see at least FIG. 7);*
- a plurality of control keys disposed on an outer surface of the housing, at least some of the control keys operable by hand (see at least FIG. 7).*

Merjanian does not specifically disclose *at least some control keys disposed in a thumb actuated cross configuration; and a fingerprint sensor integrated within a middle portion of the thumb operated cross configuration control keys*. However, in an analogous art, Darbee teaches a remote control device with an OK, or PPV control key disposed within the middle portion of the thumb operated cross configuration (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39), or selecting the PPV option. Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to a person of

ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PPV control key as this would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

#### Claim 34

Merjanian discloses *a device comprising:*

- a housing (see at least FIG. 7);*
- electronic circuitry disposed within the housing (see at least FIG. 7);*
- a signal transmitter disposed within the housing (see at least FIG. 7);*
- a plurality of control keys disposed on an outer surface of the housing, at least some of the control keys operable by hand, the control keys including an activation key operable to activate the a remote control device (see at least FIG. 7; it is noted that operating any of the buttons shown inherently activates the remote controller which does not need to be turned on *per se* with a button which is reserved only for turning on/off the remote controller).*

Merjanian does not specifically disclose that the fingerprint sensor is *integrated within the activation key*. However, in an analogous art, Darbee teaches a remote control device with an OK, or PWR control key (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39). Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to a person of ordinary skill in the art at the time the invention was

made to integrate the fingerprint sensor of Merjanian within the OK or PWR control key as this would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

#### Claim 46

Merjanian discloses *a system for user recognition and customized content provisioning, the system comprising:*

*a remote control device having a plurality of control keys, the remote device including a fingerprint sensor (see at least FIG. 7);*

*an apparatus capable of presenting customized content to the user controllable by activation of said plurality of control keys, the customized content selected dependent upon said fingerprint data of the user's finger (see at least (see at least 3:27-53)).*

Merjanian does not specifically disclose that the fingerprint sensor is *embedded in one of said control keys, whereby activation of said one of said control keys reads fingerprint data of a user's finger, said control keys include an activation key operable to activate the remote control device, and said fingerprint sensor is embedded in the activation key.* However, in an analogous art, Darbee teaches a remote control device with an OK, or PWR control key (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39). Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PWR control key as this would enable or

activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

#### Claim 49

Merjanian discloses *an apparatus for content provisioning comprising:*

*means for acquiring data related to a user without active user input or participation, the means for acquiring data including a remote control device having a plurality of control keys and a fingerprint sensor (see at least FIG. 7; as for the limitation without active user input or participation, the Office's interpretation of this requirement is that the user does not have to actively input any information or actually press any key to have the sensor read the fingerprint of the user as described by Merjanian at 11:30-31 – the user only need placing his/her digit on the sensor). Merjanian does not specifically disclose that the fingerprint sensor is embedded in one of the control keys, whereby activation of said one of said control keys reads fingerprint data of a user's finger, said control keys include an activation key operable to activate the remote control device, and said fingerprint sensor is embedded in the activation key.*

However, in an analogous art, Darbee teaches a remote control device with an OK, or PWR control key (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39). Because of the nature of the downloaded materials that depend upon the identification of the user, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PWR control key as this

would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

Merjanian further discloses means for presenting customized content to the user controllable by activation of said plurality of control keys, said customized content selected in response to said fingerprint data of the user's finger (see at least 3:27-53).

## Claim 52

Merjanian discloses *a television system comprising:*

*a remote control device having a plurality of control keys, the remote control device including a fingerprint sensor* (see at least FIG. 7);

*a processor communicatively coupled to the remote control device, the determining characteristics of the user based upon the fingerprint data* (see at least 11:17 – 12:14); and

*a display providing content to be viewed by the user, the content being customized for the user based upon the characteristics determined by the processor* (see at least 3:27-53 and 11:17 – 12:14).

Merjanian does not specifically disclose that the fingerprint sensor is *embedded in one of said control keys, whereby activation of said one of said control keys reads fingerprint data of a user's finger, said control keys include an activation key operable to activate the remote control device, and said fingerprint sensor is embedded in the activation key.*

However, in an analogous art, Darbee teaches a remote control device with an OK, or PWR control key (see at least FIG. 1) for the purpose of selectively downloading advertising and programming data to be stored on the remote control depending upon identification of the user of the remote control or based upon some assessment of the viewing habits or preferences of the user (3:31-39). Because of the nature of the downloaded materials that depend

upon the identification of the user, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to integrate the fingerprint sensor of Merjanian within the OK or PWR control key as this would enable or activate the remote controller to download the materials subsequent to a successful validation of the id of the user, thereby providing the right materials to the right user.

9. Claims 55-58 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,920,642 to Merjanian (art of record) in view of U.S. Patent No. 6,130,726 to Darbee et al. (“Darbee”) (art of record) and further in view of U.S. Patent No. 6,766,040 to Catalano et al. (“Catalano”).

#### **Claim 55**

The rejection of base claim 34 is incorporated. The combination Merjanian-Darbee does not specifically disclose *wherein*:

*said electronic circuitry is operable to enter a sleep mode and forget fingerprint sensor data if none of said plurality of control keys is operated for a predetermined period of time, and*

*re-activate from said sleep mode upon operation of said activation key and re-acquiring fingerprint data via said fingerprint sensor.*

However, Catalano teaches a device for capturing, enrolling and verifying a fingerprint, wherein in normal operation the device remains in “sleep” mode to conserve power (see at least 6:22-23 and FIGs. 3 and 5). When there is a finger present, the device reads the entire fingerprint image from the sensor and buffers the image information in dynamic memory 124 (see at least 7:8-10). After the capturing and verification are completed, the device is returned to the sleep mode and draws



almost no power until the next request is received for a fingerprint verification (17:50-53). Since the fingerprint image is stored in dynamic memory (i.e., RAM type of memory) when the device is returned to the sleep mode, there will not be sufficient power to maintain the data in the dynamic memory 124, the fingerprint image data is erased by the virtue of the design of dynamic memory. Furthermore, there is no advantage to retain the fingerprint image data after the verification is completed and access is granted to the authorized person to use the device that is attached to Catalano's device. Retaining the fingerprint image would defeat the purpose of using fingerprint verification.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the sleep mode and reactivating from the sleep mode of Catalano in the combination Merjanian-Darbee for the purpose of conserving power as suggested by Catalano at 6:22-23.

#### **Claim 56**

The rejection of base claim 46 is incorporated. Since Claim 56 recites a system comprising the same features of the device claimed in Claim 55, the same rejections are applied.

#### **Claim 57**

The rejection of base claim 49 is incorporated. Since Claim 57 recites an apparatus with the same features of the device claimed in Claim 55, the same rejections are thus applied.

#### **Claim 58**

The rejection of base claim 52 is incorporated. Since Claim 58 recites a television system with the same features of the device recited in Claim 55, the same rejections are thus applied.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday - Friday from 7:00 – 17:30.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2600 Group receptionist: 571-272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



September 19, 2007

ANTONY NGUYEN-BA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100